Minister's Report to Parents

Student Assessment Results for Nova Scotia

Language Arts
Mathematics
Science

Provincial
National
International

2003

Assessments

Minister's Report to Parents
Student Assessment Results for Nova Scotia

104-03064/

Nova Scotia

Dear Parents,

I am pleased to provide you with the third annual *Minister's Report to Parents*. These reports compare our students' achievement with their peers in Nova Scotia, across Canada, and around the world. It is one of the many initiatives your government has undertaken to give you better information about your children's education and progress.

Students across Nova Scotia are exposed to the same high-quality curriculum regardless of where they go to school. Measuring student achievement is an important part of their learning. It helps us determine how well students have learned the curriculum. It helps us decide where students need the most support and how to direct our investments to those areas. It also helps build a culture of high achievement and accountability in our education system.

Teachers are major players in the development of provincial tests. They help us write and refine test questions, prepare their students with sample questions, and in the case of senior high exams, mark their own students' papers before sending them to the Department of Education.

Results have shown us that some students are excelling while others need more support in the basics—reading, writing, and math. We responded with Learning for Life in September 2002.

Our Learning for Life plan is helping speed schools' efforts to see every student motivated to do his or her very best on every task; to see testing valued for the information it contributes to improving our children's education; and to see parents and educators working together to make improvements in their own schools for their own children. However, it will take time and continued co-operation.

Public school education is a shared responsibility. I offer my thanks to parents who are working with us, our school boards, and our teachers to help students succeed. I hope you will encourage fellow parents to follow your lead, because we all have a responsibility to nurture a culture of learning for our children.

Jamie Muir

Honourable Jamie Muir
Minister of Education

Background

Social Context

The population of Nova Scotia is 936 025. Nova Scotia has a higher rural population than the Canadian average. Immigration is low compared to immigration in Canada as a whole. About 10 percent of the population speaks both English and French, or French only. Among the total population 3.8 percent consists of visible minorities. Unemployment rates in Nova Scotia are typically above the Canadian average.

Organization of the School System

In the 2002–2003 school year Nova Scotia's total public school population was 150 599 from primary to grade 12. The province had a teaching force of 9655 and an overall student/teacher full-time equivalent (FTE) ratio of 16.5. There are 7 school boards. Six boards are regional school boards, including the Southwest Regional School Board, which is divided into two district school boards, and one is a provincial school board for Acadian/Francophone students, known as the Conseil scolaire acadien provincial. Anglophone school boards have an enrollment of 97.3 percent of the students and 2.7 percent of the students are enrolled in the Conseil scolaire acadien provincial. Overall, school enrolment is expected to continue to decrease over the next few years.

Children who are 5 years old on or before October 1 of the current school year are admitted to primary school. Students must attend school until they are 16 years old.

School Board Funding

Funding for school boards has increased and student enrolments have declined over the years as presented in the chart below.

Year	Total	Funded Enrolment	Per Student
1997–98	$660 084 693	162 029	$4074
1998–99	$722 061 813	160 902	$4488
1999–00	$750 821 400	158 750	$4730
2000–01	$754 108 200	156 761	$4811
2001–02	$761 653 500	154 476	$4931
2002–03	$808 179 400	151 862	$5322
2003–04	$878 867 900	148 700	$5910

Note: Funding adjusted to remove the impact of Early Retirement Plan

Assessment

The Program of Learning Assessment for Nova Scotia (PLANS) provides reliable information about the performance of the provincial public school system. Provincial, national, and international assessment (test) results provide the basis for focussing limited educational resources and for developing meaningful educational policies. As a performance measure, results gauge the progress of public school education and the consequences of subsequent actions and policies.

Along with other information, test results are used by the Department of Education to improve the quality of educational decision making. Our goal is to enhance the learning environment for all students in Nova Scotia.

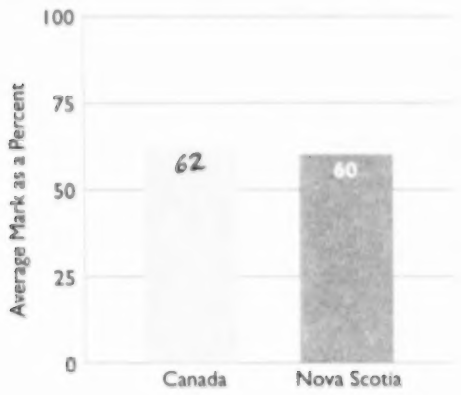
The *Minister's Report to Parents: 2003*, the third annual publication of test results, provides up-to-date information on the performance of students in Nova Scotia, in provincial, national, and international tests.

Understanding the Results

The results in this year's report are presented as averages. When results are compared either from one year to the next, or from one jurisdiction to another, simply looking at the height of the bars in each chart may be misleading. What may look like an improvement or decline in the results may, in fact, not be statistically significant. This is because the averages used to produce the charts actually fall within certain statistical limits.

For example, a result of 62 percent may actually be a little higher or lower due to measurement error. In this example, let's consider that the measurement error is +/- 2 percent. This would mean that the actual results are somewhere between 60 percent and 64 percent. Therefore, if Nova Scotia averaged 60 percent on a national test, and the Canadian average was 62 percent, then there would be no statistical difference between the two results. For example, when interpreting the chart below, it would be wrong to say that Nova Scotia students performed below the Canadian average. Despite looking as if they had a lower result on the chart, Nova Scotia students would have performed as well as students in Canada as a whole.

Example Showing No Statistical Difference



Throughout this report, each chart that includes yearly and national comparisons will also indicate if the results are statistically significant.

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Minister's Report to Parents

The *Minister's Report to Parents* publishes information on the achievement of Nova Scotia students in recent provincial, national, and international assessments (tests) of language arts, mathematics, and science. This year's report is the third to be published. Included in the report for 2003 are highlights of Learning for Life actions underway to improve student achievement.

Purpose of the Minister's Report to Parents

The purpose of the report is to provide test results that, in conjunction with other relevant information, can be used to enhance the learning environment of students in Nova Scotia and provide a reliable foundation for educational decision making and subsequent actions.

Assessment Sources Used

Some tests are not administered on an annual basis and thus no new information is available. Results of the 2003 Programme of International Student Assessment (PISA) are not available for this year's *Minister's Report to Parents*. Therefore, only two sources of information were used to prepare the report. A brief description of each follows.

Program of Learning Assessment for Nova Scotia (PLANS)
Nova Scotia develops and administers assessments for elementary, junior high, and senior high schools as part of the Program of Learning Assessment for Nova Scotia (PLANS). Included in PLANS are alternating tests in mathematics in elementary and junior high schools. In October 2003, the Elementary Literacy Assessment was conducted in grade 6 classrooms and parents will receive the results for their children. As well, Nova Scotia Examinations (NSE) are administered to grade 12 students in English language arts and the sciences. Mathematics examinations will be administered in the 2003–2004 school year. Provincial assessments for Acadian/Francophone students are in development.

School Achievement Indicators Program (SAIP)

SAIP is a national test comprising cycled administrations of mathematics, reading and writing, and science. The first mathematics test was administered in Nova Scotia in 1993. In this year's report, SAIP Writing results for 2002 are presented. The test was marked using 5 levels of criteria, increasing in difficulty from level 1 to level 5. The standard for student performance is level 2 or above for 13-year-olds and level 3 or above for 16-year-olds. Acadian/Francophone students wrote the national test in French. This national test will be replaced by a new Pan-Canadian Assessment Program (PCAP) in 2006.

Organization of the *Minister's Report to Parents: 2003*

The *Minister's Report to Parents: 2003* is organized into two sections with summary results for provincial and national assessments, by subject area

- Language Arts
- Mathematics
- Science

Summary of Assessment Results for Language Arts

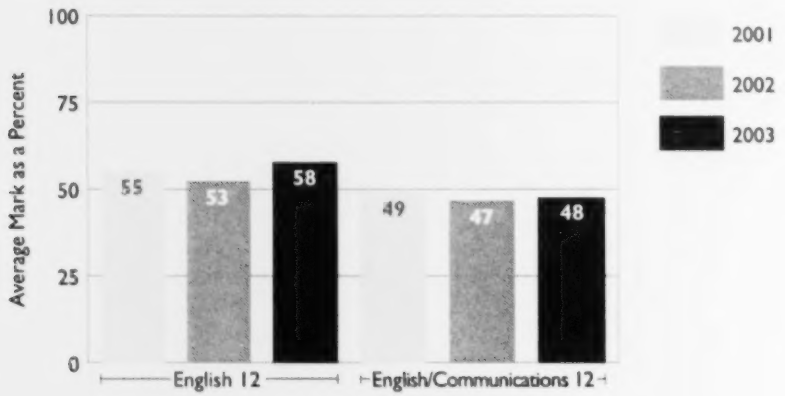
Provincial Assessment

English 12 and English/Communications 12 Examinations

Nova Scotia Examinations (NSE) were administered to grade 12 students completing their English 12 and English/Communications 12 courses.

The pass mark for NSE is 50 out of 100. The examinations count as 30 percent of a student's final course mark. Class marks comprise the other 70 percent. The results presented below are for the examination only. The chart shows the provincial results in both courses over the last three school years.

Grade 12 English Language Arts Examinations

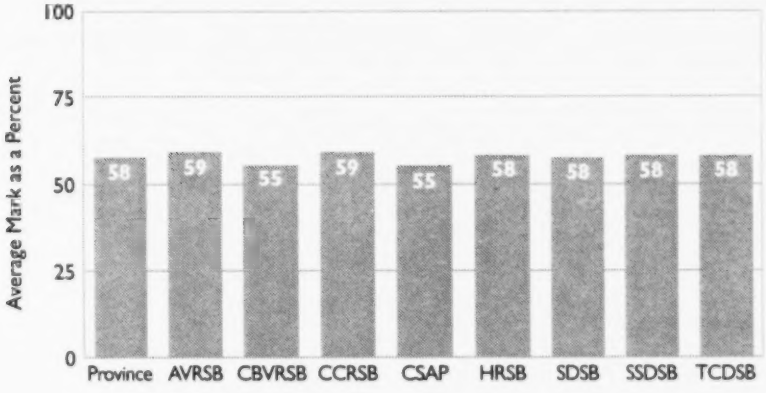


The results for English 12 (academic English) show improvement in 2003 and these results are statistically significant. For English/Communications 12, small fluctuations in the results are observed over the three year period. These fluctuations are not statistically significant. (See Understanding the Results, pages vi–vii.)

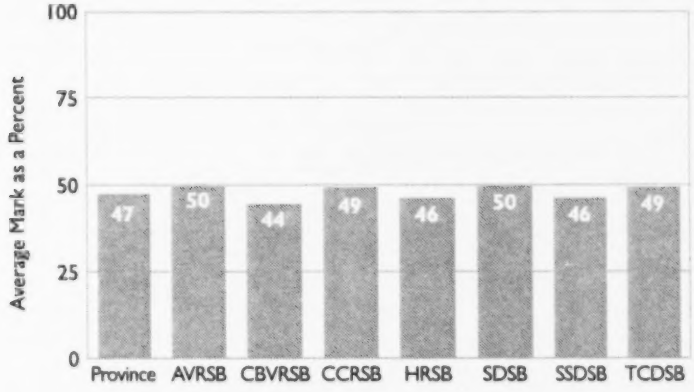
The following two charts show the school board results for English 12 and English/Communications 12 examinations written in January and June 2003.

AVRSB—Annapolis Valley Regional School Board
CBVRSB—Cape Breton-Victoria Regional School Board
CCRSB—Chignecto-Central Regional School Board
CSAP—Conseil scolaire acadien provincial
HRSB—Halifax Regional School Board
SDSB—Strait District School Board
SSDSB—South Shore District School Board
TCDSB—Tri-County District School Board

English 12 Examinations by Board



English/Communications 12 Examinations by Board



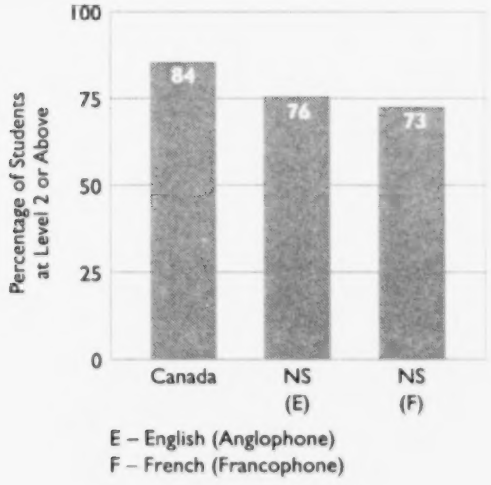
Results for each board are compared with the results for the province as a whole. There is no statistical significance observed in the board results in comparison to the provincial results for English 12 and English/Communications 12. (See Understanding the Results, pages vi–vii.)

National Assessment

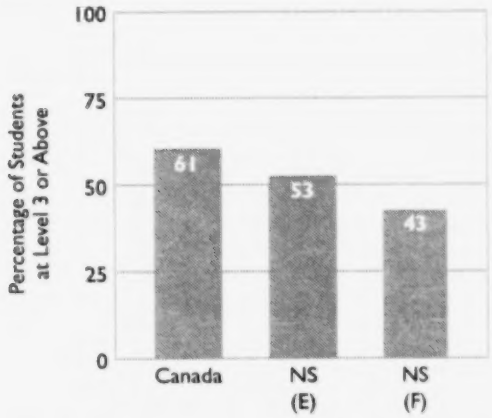
School Achievement Indicators Program

In the spring of 2002, a provincial sample of Nova Scotia 13- and 16-year-old students had their writing skills assessed by the national test. The results of the 2002 assessment were not available in time for publication in last year's *Minister's Report to Parents*. The results are presented below for each age group.

SAIP Writing (13-year-old students)



SAIP Writing (16-year-old students)



In 2002 both Nova Scotia age groups performed below the national average in the assessment. Nova Scotia students' writing skills continue to be a concern.

Summary of Assessment Results for Mathematics

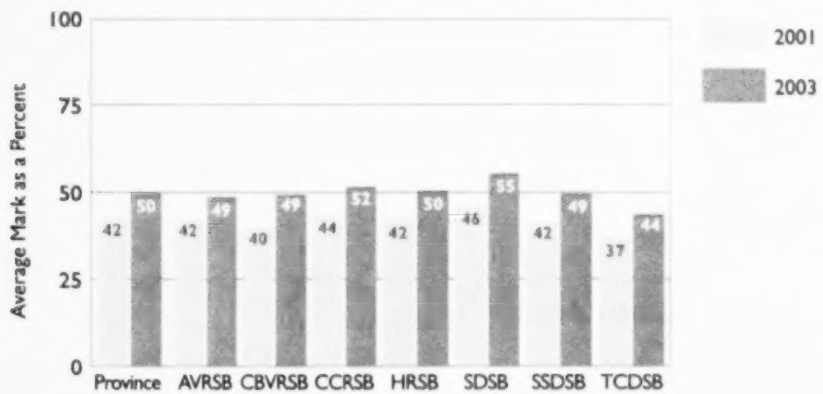
Provincial Assessment

Elementary Mathematics

In May 2003, the second Elementary Mathematics Program Assessment was conducted in Anglophone grade 5 classrooms throughout the province. The questions in the test were based on the province's mathematics curriculum for grades 3, 4, and 5. The test was conducted to determine the status of the implementation of the elementary mathematics curriculum.

The graph below shows the performance of each school board in relation to the province in the 2003 assessment. The performance of school boards between the two administrations of the assessment show significant improvement.

Elementary Mathematics Program Assessment by Board

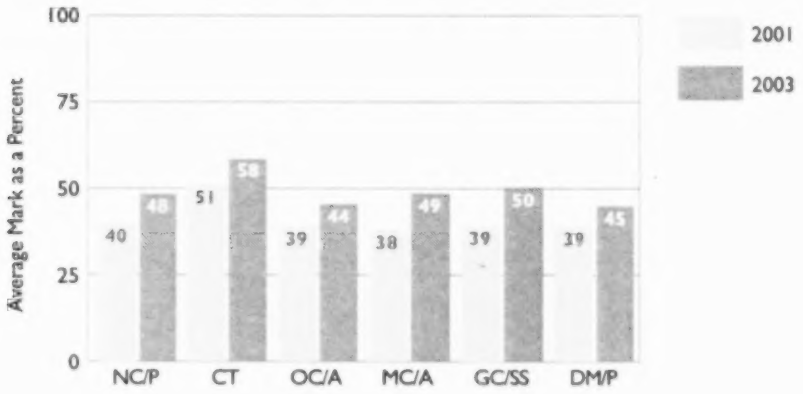


Significant improvement is observed in the results from 2001 to 2003. Provincial results have improved from 42% in 2001 to 50% in 2003. The program assessment results are used by the Department of Education to focus its resources in the areas of the curriculum with the greatest need.

The test provided information about the major parts of the mathematics curriculum including Number Concepts and Patterns (NCP), Computational Tasks (CT), Operation Concepts and Applications (OC/A), Measurement Concepts and Applications (MC/A), Geometry Concepts and Spatial Sense (GC/SS), and Data Management and Probability (DM/P).

The graph that follows compares the results for the province in 2001 and 2003 for each of the major parts of the curriculum. Improvement in all parts of the mathematics curriculum is observed.

Elementary Mathematics Program Assessment



National Assessment

School Achievement Indicators Program

There are no plans to administer another SAIP mathematics assessment. SAIP will be replaced by a new national test; Pan-Canadian Assessment Program (PCAP) in 2006.

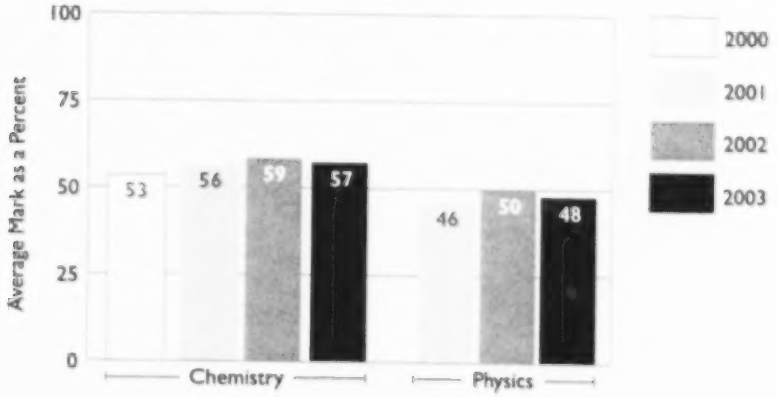
Summary of Assessment Results for Science

Provincial Assessment

Nova Scotia Examinations (NSE) are administered each year in the sciences to grade 12 Anglophone students completing courses at the end of January and June. The pass mark is 50 out of 100.

The chart that follows gives the results for Chemistry 12 and Physics 12 examinations administered since 2000. The physics examination began in 2001.

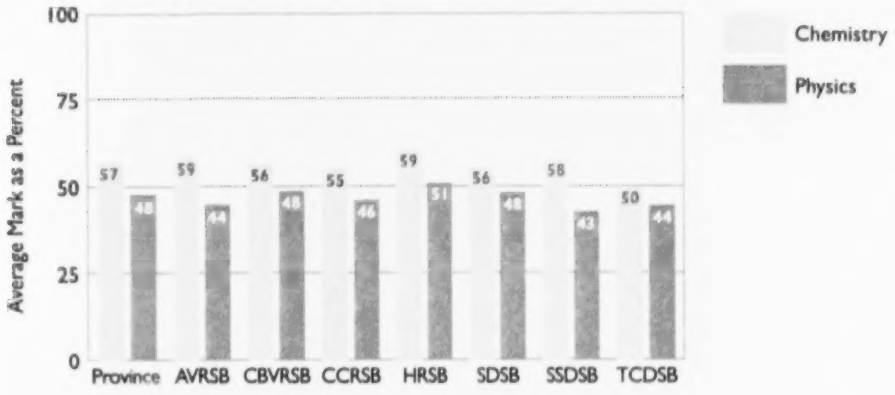
Grade 12 Science Examinations



Overall provincial results have improved since 2000. (See Understanding the Results, pages vi–vii.)

The following chart presents the 2003 results in chemistry and physics for each school board.

Grade 12 Science Examinations 2003 by Board



National Assessment

School Achievement Indicators Program

The SAIP science assessment will be administered in the spring of 2004. The results will be published in a future edition of the *Minister's Report to Parents.*

Moving Forward with Learning for Life

Since September 2002, Learning for Life has been guiding strategic investments in Nova Scotia classrooms. The plan focusses on supporting students in the early years, ensuring they develop a solid foundation in the basics upon which to build. It also includes more support for quality teaching, measures for more accountability, and initiatives to inform and involve parents in meaningful ways.

With the help of teachers, school boards, parents, and others, Learning for Life is now well underway and will continue to improve our students' learning over time. Some highlights of Learning for Life achievements to date and actions soon to be implemented include the following:

> Smaller class sizes are helping our youngest students get the attention they need. More than $2 million was invested in 2003–2004 to hire teachers and reduce class size to 25 for primary students. The initiative is scheduled to expand to grade 1 in September 2004 and to grade 2 the following year.

> Students are spending more class time on math and reading to get a stronger foundation in the basics. The Time to Learn strategy was introduced in primary to grade 6 in September 2002. It will extend to grades 7 and 8 in September 2004.

> Elementary students now have more resources to develop strong writing skills. They're using Writers in Action handbooks in class and at home to check grammar and polish their written work. The reference books were tailor-made for Nova Scotia and are the students' personal property for use throughout grades 4, 5, and 6. Since September 2002, the books are being given to new Grade 4 students every fall. Students and teachers in these grades also have many new classroom resources.

> Junior high students are getting more support for their development as readers. Nearly $1.7 million was invested in new reading books for grade 7 and 8 classrooms through Active Readers. This initiative will extend to grade 9 in 2004–2005, and to grade 10 the following year.

- Teachers are getting more support to help students improve their math skills. 'Math leader' workshops were held for nearly 900 teachers in 2002 and for 1000 principals and teachers in 2003. These professionals are now helping fellow teachers in their schools to improve their math teaching skills. More than $1 million was invested in 2003–2004 for professional development and full-time math leaders who strengthen math teaching in their school board. More than $1 million has been invested in new textbooks and resources, with more to come.
- Parents are getting help to support their children's reading and writing at home. Information is being distributed to help them understand and enhance their children's learning. In 2003, the *Let's Talk About ...* series of pamphlets on reading was distributed to parents of primary to grade 2 students. Parents of grade 4 students received a *Writers in Action* guide in 2002 and 2003. More materials for parents are being developed for distribution in 2004.

Students in the early years will benefit greatly from these initiatives. Over time, these actions will help all of our students show improvement in their assessment results. It will not happen overnight. It will take time and the continued commitment of everyone in our education system.

A complete copy of our Learning for Life plan is available at <EDnet.ns.ca>. Information on the Program of Learning Assessment for Nova Scotia is available at <plans.EDnet.ns.ca>.

For more information, please contact:

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